

Redescription of a Rare North Atlantic Doridacean Nudibranch, *Aegires sublaevis* Odhner¹

BY

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(2 Text figures)

INTRODUCTION

IN JUNE 1979, Dr. W. Sterrer gave me for study a living nudibranch, 9 mm in length, which was part of a collection of 5 individuals with spawn found in 2 m depth at North Rock, one of the furthest offshore localities in Bermuda. These nudibranchs had been found on a yellow sponge (*Clathrina* sp.), the coloration of which they closely matched. Three more specimens of this unusual nudibranch, previously unrecorded from Bermuda, were later given to me by Dr. K. B. Clark; they had been preserved in Bermuda in July 1979. These formed the basis for a histological study carried out on my return to Bristol.

This material proved to match fairly closely the type description given by ODHNER (1932) of a species from Tenerife in the Canary Islands, *Aegires sublaevis*, based upon a single 11 mm individual. ROS (1976) confirmed the presence of this species in the Canary Islands and later (ROS, 1977) published a colour photograph showing it living on the sponge *Clathrina coriacea* on Fuerteventura. Meanwhile, NORDSIECK (1972) had introduced a new generic name for Odhner's species, *Serigea* (type *A. sublaevis* Odhner), but without a proper diagnosis and without explaining why a new genus should be needed.

Aegires sublaevis is an unusually interesting doridacean, with an amphiatlantic distribution and, moreover, it displays links between the typically Atlantic genus *Aegires* Lovén, 1844 (type *Polycera punctilucens* Orbigny, 1837) and the equivalent Indo-Pacific genus *Notodoris* Bergh, 1875 (type *N. citrina* Bergh, 1875). The present redescription may facilitate discovery in other parts of its range.

DESCRIPTION

External Features (Figure 1). The body of the 9 mm specimen was tough and hard in life, belying its frail ap-

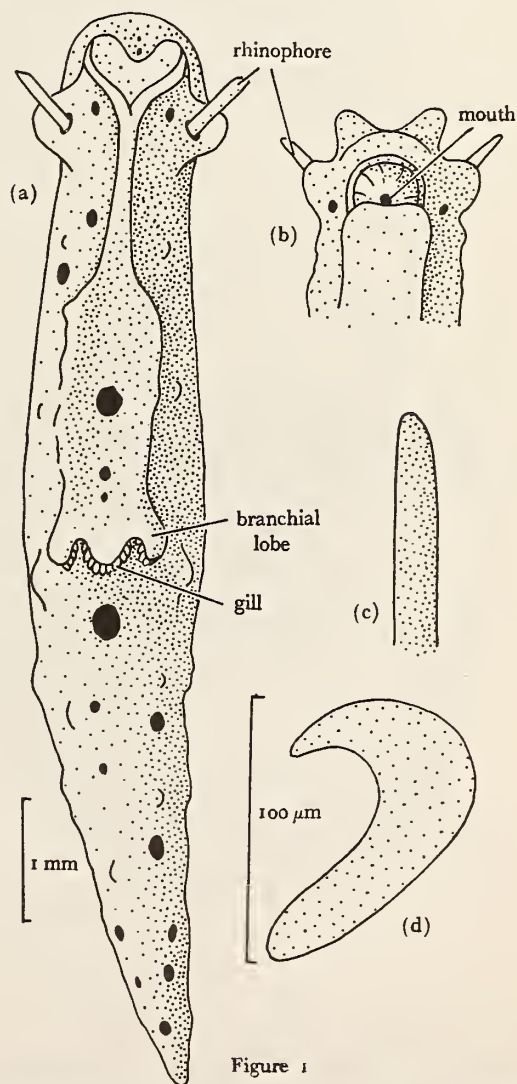


Figure 1

Diagnostic features of *Aegires sublaevis*, 9 mm long, North Rock, Bermuda, June 1979. (a) from the dorsal aspect; (b) ventral view of the head; (c) side view of the rhinophore; (d) camera lucida drawing of a representative radular tooth (row 2 from the growing end, tooth 12 from the mid-line)

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pearance. The colour was pale lemon yellow, with a pattern of dark brown spots as shown in Figure 1 (a). The slender body bore scattered low mamillae. A low ridge was evident mid-dorsally, bifurcating anteriorly and parting again at its rear, some little way behind the rhinophores. The posterior ridges led to the gills, 3 in number. Each gill was protected by a tough branchial lobe, and consisted of simple lamellae. The smooth rhinophoral tentacles (Figure 1 (c)) each issued from a pit located in the centre of a prominent antero-lateral pallial flap. The metapodium was long and slender, occupying about one half of the total body-length.

Ventrally, the propodium was undivided (not bilaminate); the rounded head lacked oral tentacles. The spawn, like the parent, was lemon yellow in colour.

Anatomy and Histology. The ovotestis and the anterior genital mass were well developed. Serial sections showed

that the terminal part of the vas deferens was lined by numerous chitinous hooks, probably becoming external on eversion of the intromittent organ. The anus and the adjacent nephroproct were behind the crescent of gills.

Two features of importance were observed in the buccal mass. First, there were large numbers of complex glands opening into the oral canal; second, there was a substantial median dorsal thickening of the chitinous lining of the buccal canal. This median structure may be presumed to act in concert with the radula during feeding and warrants the appellation of a jaw (Figure 2).

The radular formula was $16 \times 13.0.13$ (Odhner's 11 mm specimen had the formula $17 \times 17.0.17$). All the teeth were blunt hooks, $105 \mu\text{m}$ in the longest dimension (Figure 1 (d)).

DISCUSSION

Knowledge of this species extends considerably our understanding of the genus *Aegires*, which typically exhibits numerous soft pallial papillae and a pliable body. *Aegires sublaevis* shows interesting annectant features by which the genus may be compared with the equivalent Indo-Pacific *Notodoris*. It resembles *Notodoris* (e.g., *N. gardineri* Eliot, 1906, recently redescribed by THOMPSON (1975)) in its inflexible body, but differs in its possession of a median jaw and of simple radular teeth (bifid in the Indo-Pacific genus). Both genera possess spines on the vas deferens.

In conclusion, it may be noted that the genus *Serigea* Nordsieck, 1972 is neither properly constituted (lacking a diagnosis) nor necessary.

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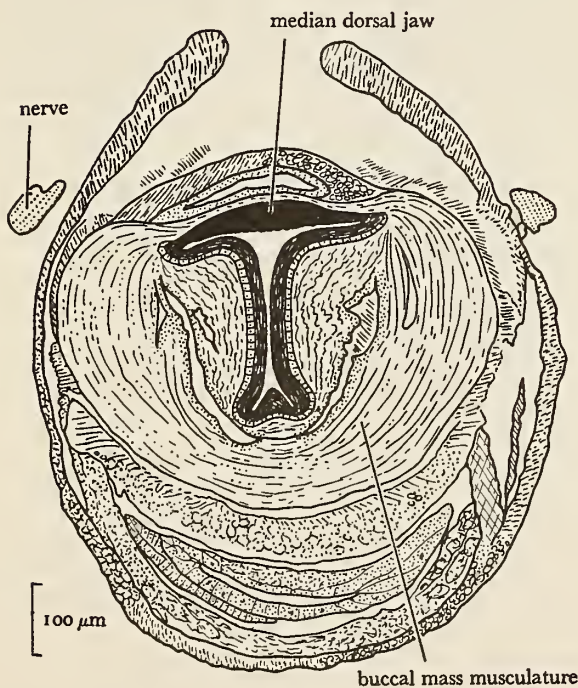


Figure 2

Transverse section through the buccal mass of *Aegires sublaevis*